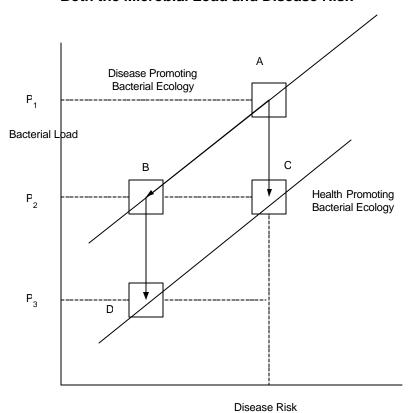
Figure 1. Diagrammatic Representation of Mechanical and/or Antimicrobial Therapy on Both the Microbial Load and Disease Risk



- A B Change in bacterial load and disease risk resulting from SRP.
- A C Change in bacterial load resulting from antimicrobial therapy.
- B D Change in bacterial load and disease risk resulting from SRP and antimicrobial therapy together.

Figure 2. Added Effectiveness of Therapies Adjunctive to Scaling and Root Planing for Treatment of Chronic Periodontitis: Causal Pathway

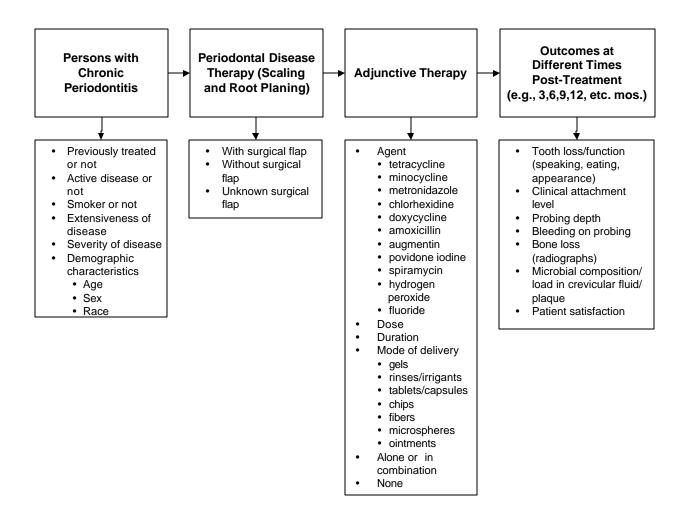


Figure 3. Meta-analysis of Systemic Tetracycline and SRP vs. SRP Alone: Probing Depth

Study	Treatment N	Control N	Difference in Means (mm) 95% CI	Weight %	Difference in Means (mm) [95% CI]
Listgarten et al., 1978 43	6	6		14.94	0.20 [-0.93, 1.33]
Lindhe et al., 198344	7	7	+	16.81	0.90 [-0.17, 1.97]
Al-Joburi et al., 1989*45	24	27	+	68.25	-0.05 [-0.58, 0.48]
Total (95% CI)	37	40	•	100.00	0.15 [-0.29, 0.58]
Test for heterogeneity: Chi ² = 2	.46, df = 2 (P = 0)	0.29), I ² = 18	3.6%		
Test for overall effect: $Z = 0.66$	(P = 0.51)				
			-2 0 2		

^{*}Only subjects with initial PD = 4 mm to = 6 mm.

Figure 4. Meta-analysis of Local Tetracycline and SRP versus SRP Alone: Probing Depth

Study	Treatment N	Control N	Difference in Means (mm) 95% Cl	Weight %	Difference in Means (mm) [95% CI]
MacAlpine et al., 1985 ³¹	11	11		2.29	0.40 [-1.25, 2.05]
Jeong et al., 1994*33	16	16	_ 	12.39	0.93 [0.22, 1.64]
Jeong et al., 1994 ³³	16	16		13.03	0.27 [-0.42, 0.96]
Kinane and Radvar, 1999 ⁵³	19	20	 -	13.03	0.67 [-0.02, 1.36]
Lie et al., 1998 ³⁴	18	18	 •	14.63	0.60 [-0.05, 1.25]
Unsal et al., 1994 ⁵⁹	7	8		16.77	-0.43 [-1.04, 0.18]
Newman et al., 1994 ⁵⁷	105	105	-	27.87	0.73 [0.26, 1.20]
Fotal (95% CI)	192	194	•	100.00	0.47 [0.22, 0.72]
Test for heterogeneity: $Chi^2 = 11$.88, df = 6 (P =	0.06 , $I^2 = 49$	9.5%		
Fest for overall effect: $Z = 3.65$ (I	P = 0.0003)				

^{*}Tetracycline gel with citric acid used as treatment.

Figure 5. Meta-analysis of Local Tetracycline and SRP versus SRP Alone: Clinical Attachment Level

Study	Treatment N	Control N	Difference in Means (mm) 95% CI	Weight %	Difference in Means (mm) [95% CI]
MacAlpine et al., 1985 ³¹	11	11		1.09	0.30 [-1.35, 1.95]
Jeong et al., 1994*33	16	16		6.07	0.73 [0.03, 1.43]
Jeong et al., 1994 ³³	16	16	-	6.17	0.14 [-0.55, 0.83]
Lie et al., 1998 ³⁴	18	18		6.89	1.00 [0.34, 1.66]
Friesen et al., 2002 ⁵⁸	24	24	 -	7.10	0.44 [-0.21, 1.09]
Unsal et al., 1994 ⁵⁹	7	8		7.70	-0.23 [-0.85, 0.39]
Newman et al., 1994 ⁵⁷	105	105	 -	9.20	0.48 [-0.09, 1.05]
Friesen et al., 2002 ^{† 58}	24	24		9.59	0.48 [-0.08, 1.04]
Kinane and Radvar, 1999 ⁵³	19	20		9.79	0.15 [-0.40, 0.70]
Goodson et al., 198548	8	8	_	11.44	0.01 [-0.50, 0.52]
Tonetti et al., 1998 ³⁵	63	60	+	24.97	0.00 [-0.34, 0.34]
Total (95% CI)	311	310	•	100.00	0.24 [0.07, 0.42]
Test for heterogeneity: $Chi^2 = 13$ Test for overall effect: $Z = 2.78$		$= 0.18$), $I^2 = 27$	7.7%		

^{*}Tetracycline gel with citric acid used as treatment.

†Multiple tetracycline strips used as treatment.

Figure 6. Meta-analysis of Local Minocycline and SRP versus SRP Alone: Probing Depth

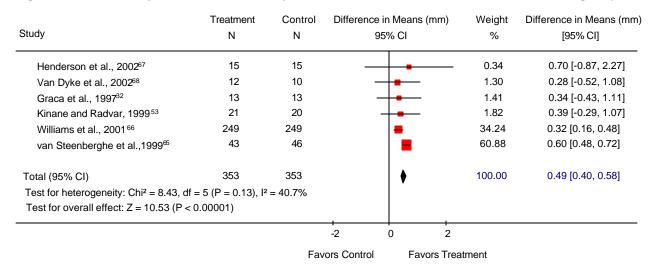


Figure 7. Meta-analysis of Local Minocycline and SRP versus SRP Alone: Clinical Attachment Level

Study	Treatment N	Control N	Difference in Means (mm) 95% CI	Weight %	Difference in Means (mm) [95% CI]
Henderson et al., 2002 ⁶⁷	15	15		1.04	0.80 [-0.61, 2.21]
Van Dyke et al., 2002 ⁶⁸	12	10	 •	2.79	0.48 [-0.38, 1.34]
Graca et al., 1997 ³²	13	13	 •	3.37	0.39 [-0.39, 1.17]
Kinane and Radvar, 199953	21	20	-	8.50	0.04 [-0.46, 0.53]
van Steenberghe et al.,199965	43	46	=	84.30	0.50 [0.34, 0.66]
Total (95% CI)	104	104	•	100.00	0.46 [0.32, 0.60]
Test for heterogeneity: Chi ² = 3.34	df = 4 (P = 0)	.50), $I^2 = 0\%$	·		
Test for overall effect: $Z = 6.25$ (P	< 0.00001)				

Figure 8. Meta-analysis of Local Metronidazole and SRP versus SRP Alone: Probing Depth

N	N	95% CI	%	[95% CI]
14	14		2.98	0.80 [0.09, 1.51]
15	18	_ 	3.12	0.90 [0.21, 1.59]
18	18	 	3.46	0.50 [-0.16, 1.16]
29	29		3.50	0.00 [-0.65, 0.65]
59	59	- - -	11.53	0.18 [-0.18, 0.54]
88	88	-	23.83	0.50 [0.25, 0.75]
19	20	=	51.58	0.22 [0.05, 0.39]
242	248	•	100.00	0.32 [0.20, 0.44]
= 6 (P = 0.14)	I_{1} , $I_{2} = 37.4\%$	ľ		
00001)				
	15 18 29 59 88 19 242 6 (P = 0.14)	15 18 18 18 29 29 59 59 88 88 19 20 242 248 6 (P = 0.14), ² = 37.4%	15 18 18 18 29 29 59 59 88 88 19 20 242 248 ••••••••••••••••••••••••••••••••••••	15 18 3.12 18 18 3.46 29 29 3.50 59 59 11.53 88 88 88 23.83 19 20 51.58 242 248

Figure 9. Meta-analysis of Local Metronidazole and SRP versus SRP Alone: Clinical Attachment Level

Study	Treatment N	Control N	Difference in Means (mm) 95% CI	Weight %	Difference in Means (mm) [95% CI]
Moran et al., 1990 ³⁷	15	18		2.75	0.30 [-0.39, 0.99]
Lie et al., 1998 ³⁴	18	18		2.96	0.70 [0.04, 1.36]
Riep et al., 1999 ⁷⁸	29	29	_ -	3.79	0.20 [-0.38, 0.78]
Palmer et al., 1998 ⁷⁶	26	27	-	8.68	-0.04 [-0.43, 0.35]
Stelzel and Flores-de-Jacoby, 200036	59	59	<u> </u>	9.95	0.07 [-0.29, 0.43]
Griffiths et al., 2000 ⁷⁹	88	88	-	20.55	0.40 [0.15, 0.65]
Kinane and Radvar, 1999 ⁵³	19	20	†	51.32	0.00 [-0.15, 0.16]
Total (95% CI)	254	259	•	100.00	0.12 [0.01, 0.24]
Test for heterogeneity: Chi ² = 10.86, df =	$6 (P = 0.09), I^2$	2 = 44.8%	ľ		
Test for overall effect: Z = 2.14 (P = 0.03)				
-			<u> </u>		
			-2 0 2		

Figure 10. Meta-analysis of Local Chlorhexidine and SRP versus SRP Alone: Probing Depth

Study	Treatment N	Control N	Difference in Means (mm) 95% CI	Weight %	Difference in Means (mm) [95% CI]		
Quirynen et al., 2000 95	12	12		0.39	-0.10 [-1.85, 1.65]		
Unsal et al., 1994 ⁵⁹	7	8		1.01	-0.25 [-1.34, 0.84]		
Grisi et al., 200294	10	9		1.50	-0.20 [-1.09, 0.69]		
Braatz et al., 198530	14	14	- 	2.18	0.30 [-0.44, 1.04]		
MacAlpine et al., 1985 ³¹	11	11		2.43	1.00 [0.30, 1.70]		
Heasman et al., 200192	24	24	+	4.98	0.33 [-0.16, 0.82]		
Soskolne et al., 199790	94	94	-	23.96	0.46 [0.24, 0.68]		
Jeffcoat et al., 199891	213	211	=	63.54	0.14 [0.00, 0.28]		
Total (95% CI)	385	383	•	100.00	0.24 [0.13, 0.35]		
Test for heterogeneity: Chi ² = 12.29, df = 7 (P = 0.09), I^2 = 43.0% Test for overall effect: Z = 4.31 (P < 0.0001)							
			-2 0 2				

Figure 11. Meta-analysis of Local Chlorhexidine and SRP versus SRP Alone: Clinical Attachment Level

